

Work Order ID 80940

80940

March-05-12 3:24:50 PM

Page

Item ID: D350-636-011

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Skidtube LH

Start Date: 05/03/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 19/03/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: M-L J

Date: 12/03/05

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2750

F

D3492

C

100

0.00

100

DC

DOCUMENT CONTROL

Memo

0.00

Document Control

Photocopy blue file and type labels per PPP D350-636-011 CHG 006

80940.

5-16-12 J. L. M. L. S. 12-4-16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
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Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

110

0.00

110

Skidtubes

Skidtubes

Memo

0.00

Skidtubes

✓ 1- Pick D2600-3 Bent

✓ 2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D2750

✓ 3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500", deburr.

✓ 4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting

✓ 5- Drill only two fwd step holes using DT9616. Ensure proper positioning.

6- Drill pilot holes as per Dwg D2750 sheet 4 (D2750-1 details). Drill using drill Jig DT8150 & DT8863A for first side only DT8863B for second side (detail B)

7- Clecko DT8863B on second side of tube and drill pilot holes for detail B.
SECOND SIDE

8- Open up holes for Detail B to 0.375" (4 holes per side) and blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D2750. Open up holes for ground handling and detail C to 0.500" (8 holes per side)

9- Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to 0.297"

10- Open up holes of Detail A to 0.297" (total of 2 holes per side)

SAD 12-03-13

W/O:		WORK ORDER CHANGES					
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Run Start *NR1*

QC: Date: SPC (Y/N): Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

11-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left from bending as per QSI 004

A/R Aluminum Rod batch: M120164 BE 12/03/13

12-Grind welds flush as per Dwg D2750 SAD 12-03-13

120

QC10- Inspect visual per QSI004- ground welds

0.00

120

QC

Memo

0.00

Quality Control

130

QC5- Inspect part completeness to step on W/O

0.00

130

QC

Memo

0.00

Quality Control

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

140

Chemical Conversion Coat per QSI005 4.1

0.00

140

HandFinish

Memo

0.00

Hand Finishing

①

SAD 12-02-13

150

QC3- Inspect Part Finish

0.00

150

QC

Memo

0.00

Quality Control

DP

12-3-13

PTC

Dart Aerospace Ltd

W/O: 80940		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
12-3-13	150	Should read QC7 Done AJ	[Signature]	12-3-13			6/17/14	

Part No: D350-636011 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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12-3-13	1							

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Run Start *NR1*

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Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

160

0.00

160

Skidtubes

0.00

Skidtubes

Memo

Skidtubes

✓ 1-Open up holes of Detail C and ground handling to 0.625" (total of 8 holes per side)
as per dwg D2750.

✓ 2-Open up holes of Detail B to 0.750" (total of 4 holes per side)
as per dwg D2750.

✓ 3- Open float hole to 0.500" (4 per side)

✓ 4-Chamfer holes of Detail B, C, ground handling and float holes per dwg D2750
(welding instructions on sheet 8)

✓ 5-Deburr and blow out all chips from inside of tube

6- Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI015

A/R Sikaflex-291

batch:

exp. date: M1208/3
202/08/13

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004
(welding instructions on sheet 8)

A/R Aluminum Rod

batch:

M120164

9- At section AJ-AJ drill out x-bolt spacer to 0.404"

10-Grind welds flush as per Dwg D2750

SAD 12-03-14

BE 12/03/14

BE 12/03/15

CF 12-3-15

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Run Start ***NR1***

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Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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11-Spot face ground handling holes section (total of 4 places per side) as per
dwg D2750

DP 12-3-15

12-Deburr holes

170

QC10- Inspect visual per QSI004- ground welds

0.00

170

8/2/03/16

QC

Memo

0.00

Quality Control

180

QC5- Inspect part completeness to step on W/O

0.00

180

8/2/03/16

QC

Memo

0.00

Quality Control

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Run Start ***NR1***

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Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

190

Pressure Wash per QSI005 4.3

0.00

190

HandFinish

Memo

0.00

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

1X M-12/03/17

200

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

200

Powdercoat

Memo

0.00

Powder Coating

START TIME: *2:15*OVEN TEMPERATURE: *320°*FINISH TIME: *3:45**1 BR 12-3-19*

210

QC³ Inspect Chemical Conversion Coat

0.00

210

QC

Memo

0.00

Quality Control

Inspect for foreign object per QSI 024

1X 12/03/21 M-1

Dart Aerospace Ltd

W/O: 8940		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
12-03-21	240	permanent change Dae [Signature]				h 12-03-21	

Part No: D350-636-011 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 80940***80940***

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March-05-12 3:24:50 PM

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1

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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

220

0.00

220

HandFinishing

HandFinish

Memo

0.00

Hand Finishing

1- Install inserts as per Dwg D2750

1 BL 12-3-21

230

0.00

230

HandFinishing

HandFinish

Memo

0.00

Hand Finishing

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3" batch: n/a

3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750

SIKA FLEX 240

BATCH: 119994EXP DATE: 12-5

4-assemble o-ring to plug as per dwg D3487 and apply o-ring lube

A/R 55-o-ring lube batch: 1103485-Coat all exposed fasteners with "LPS Procyon" batch: 111596

1 BL 12-3-21 PTO=

Dart Aerospace Ltd

W/O: 80940		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
12/04/11	230	Touch up Alodine & improve paint	JP	12/04/11	X1		

Part No: D350-636-011 PAR #: _____ Fault Category: did-tube NCR: Yes No DQA: done Date: 12/04/23
 Resolution: Resent Disposition: Rework QA: N/C Closed Date: 12/4/23

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12/04/11	#230	Found that shaft hole is old and not ^{went} allow the bolt to pass through SKID & Blade fitting. R.C. Process / Hammer error.	CP 12.04.11 CS/HLZ	- open hole up to 0.520"-0.530" touch up Alodine as per Assy and Apply white primer to hole.	JP 12/04/11	JP 12/04/11	JP 12.04.11 CS/HLZ	JP 12/04/11

NOTE: Date & initial all entries

Work Order ID 80940

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March-05-12 3:24:50 PM

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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

240

QC5- Inspect part completeness to step on W/O

0.00

240

QC

Memo

0.00

Quality Control

250

Pick Kit

0.00

250

Packaging

Memo

0.00

Packaging

260

QC4- 100% Inspect kits for completeness

0.00

260

QC

Memo

0.00

Quality Control

*****ensure antiseize is on AN8C21A bolts*****

8/7/17

6/4/12 180

70

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270		0.00							
270	Packaging					1x			Sp
Packaging	Memo	0.00							12-04-17
Packaging	Package as per PPP D350-636-011								
									72 Rev I
280									
280	QC21- Final Inspection - Work Order Release	0.00							12/4/19
QC	Memo	0.00							
Quality Control									

12-04-18

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Picklist Print

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D350-636-011

Parent Item Name: Skidtube LH

Start Date: 05/03/2012

Required Date: 19/03/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:I 02.09.25 Rearranged procedure steps KJ
 IPP Rev:J 06-03-23 As per Rev D JLM
 IPP Rev:K 06-07.13 As per dsi9343 EC
 IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verf:EC
 IPP Rev:M 08-04-22 update steps 4, 13 DD verified by:EC
 IPP Rev:N 08-09-23 revF as per dwg DD verified by:ec
 IPP Rev:O 09-02-06 apply antiseize on AN8C21A bolts as per PAR09-010
 DD verf:EC IPP Rev:P 10.06.22 revise
 seq110 DD verf:EC IPP Rev:Q 10.10.01 as per IIN revH
 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3492-1		Manufactured	No			230	Each	138.0000	8	8			
D3492-1									**				
Plug													

Location	Loc Qty	Loc Code
FP002	138	
69531	8	
74444	2	
76235	28	
77037	100	

D3492-3		Manufactured	No			230	Each	77.0000	8	8			
D3492-3									**				
Plug													

Location	Loc Qty	Loc Code
FP002	1	
77039	1	
FP-A	76	
78600	76	

BR 12.3.21.

BR 12.3.21.

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D350-636-011

Parent Item Name: Skidtube LH

Start Date: 05/03/2012

Required Date: 19/03/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1611-010

Purchased

No

230

Each

167.0000

8

8

NAS1611-010

O-RING

**

PR 12-3-21

Location

Loc Qty

Loc Code

FP	50	
110915	0	
120770	50	
FP001	117	
110915	14	
117460	8	
118077	1	
118612	3	
119438	47	
120308 ✓	44	

NAS1149D0863J

Purchased

No

250

Each

231.0000

2

2

NAS1149D0863.I

WASHER

**

CR 80

Location

Loc Qty

Loc Code

ST298	231	
118078	36	
119307	95	
120308	100	

119307

D2744

Manufactured

No

110

Each

62.0000

1

1

D2744

Cap

**

BE 12/03/13

Location

Loc Qty

Loc Code

LG002	62	
62715	1	
70881	12	
71861	7	
78900	42	

1

March-05-12 3:24:54 PM

Shop Packet Print

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Start Qty: 1.00

Required Qty: 1.00

D2600-3-BENT

Manufactured No

110

Each

15.0000

1

1

D2600-3-BFNT

Extrusion Bent

**

SAD 12-03-13

Location

Loc Qty

Loc Code

LG

15

66875

7

73253

1

75021

1

75022

1

75023

1

79497

4

D2743

Manufactured No

160

Each

264.0000

8

8

D2743

Crossbolt Spacer

**

BE 12-03-15

Location

Loc Qty

Loc Code

LG001

264

67766

4

68251

3

73403

64

74445

1

78603

92

79517

100

D2739

Manufactured No

160

Each

11.0000

1

1

D2739

350 I Beam

**

BE 12/03/14

Location

Loc Qty

Loc Code

LG

11

72155

1

80083

10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 4

Work Order ID: 80940

80940

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 05/03/2012

Required Date: 19/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3490-3 Manufactured No

160 Each 46.0000 4 4

D3490-3

Cross Bolt Spacer

**

BE 12/3/15

Location

Loc Qty

Loc Code

LG001

46

77567

6

78800

40

4

D3490-1 Manufactured No

160 Each 57.0000 4 4

D3490-1

Cross Bolt Spacer

**

BE 12/3/15

Location

Loc Qty

Loc Code

LG001

57

62450

2

74875

4

77042

8

78793

43

4

ALS4-1032-225 Purchased No

220 Each 1,194.000 38 38

ALS4-1032-225

Insert

**

BE 12-3-21.

Location

Loc Qty

Loc Code

ST281

1031

108696

146

110768

62

118386

55

118966

68

120671 ✓

700

38

ST282

163

120410

150

120451

13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 80940

80940

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 05/03/2012

Required Date: 19/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3793-3 Manufactured No

230 Each

26.0000 1 1

D3793-3

**

BR 12-3-21

Wearshoe

Location

Loc Qty

Loc Code

FP001

12

80434

12

FP002

14

78935 ✓

14

AN8C35A

Purchased No

230 Each

66.0000 1 1

AN8C35A

**

BR 12-3-21

BOLT

Location

Loc Qty

Loc Code

FP002

65

115960

1

117834 ✓

10

118286

54

ST346

1

114442

0

115188

0

115960

1

D3793-1

Manufactured No

230 Each

18.0000 1 1

D3793-1

**

BR 12-3-21

Wearshoe

Location

Loc Qty

Loc Code

FP001

18

77029 ✓

6

78901

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-05-12 3:24:54 PM

Work Order ID: 80940

80940

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 05/03/2012

Required Date: 19/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3488-041

Manufactured No

230

Each

17.0000

1

1

D3488-041

Blade Fitting Assembly, LH

**

BR 12.3.21.

Location

Loc Qty

Loc Code

FP002

17

61689

1

75056

7

77021

9

D3794-3

Manufactured No

230

Each

7.0000

1

1

D3794-3

Gasket

**

BR 12.3.21.

Location

Loc Qty

Loc Code

FP002

7

74530

2

78895

5

AN6C44A

Purchased No

230

Each

95.0000

4

4

AN6C44A

BOLT

**

BR 12.3.21.

Location

Loc Qty

Loc Code

FG

2

103964

2

ST343

93

120095

16

120143

25

120465

27

120641

25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 7

Work Order ID: 80940

80940

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 05/03/2012

Required Date: 19/03/2012

Start Qty: 1.00

Required Qty: 1.00

MS21083C8

Purchased

No

230

Each

67.0000

1

1

MS21083C8

NUT

**

BR 12-3-21

Location

Loc Qty

Loc Code

FP002

1

115884

1

ST303

15

115884

0

118077

1

119309

2

119436 ✓

10

119638

2

ST304

51

120142

26

120731

25

D3536-25

Manufactured

No

230

Each

16.0000

1

1

D3536-25

Gasket

**

BR 12-3-21

Location

Loc Qty

Loc Code

FP002

16

78902 ✓

16

D3631-1

Manufactured

No

230

Each

223.0000

8

8

D3631-1

Washer

**

BR 12-3-21

Location

Loc Qty

Loc Code

ST072

223

68062

2

75548 ✓

221

March-05-12 3:24:54 PM

Shop Packet Print

Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 80940

80940

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 05/03/2012

Required Date: 19/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3791-1 Manufactured No

230

Each

17.0000

1

1

D3791-1

Wearplate

**

BR 12-3-21

Location

Loc Qty

Loc Code

FP002

17

62239

2

75041 ✓

3

78897

12

AN960C10L

* NAS1149C0332 ✓
R

Purchased

No

230

Each

0.0000

38

38

*AN960C10I *

washer

DO 648.

**

38. BR 12-3-21

D2745

Manufactured

No

230

Each

44.0000

8

8

D2745

Bushing

**

BR 12-3-21

Location

Loc Qty

Loc Code

FP001

44

69529

1

76142

1

78597 ✓

42

8.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-05-12 3:24:54 PM

Work Order ID: 80940

80940

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 05/03/2012

Required Date: 19/03/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C5A

Purchased

No

230

Each

1,010.000

34

34

AN3C5A

Bolt

**

BR 12-3-21.

Location

Loc Qty

Loc Code

FP001

7

115835

7

ST350

1003

116419

28

117343

13

117764

7

117872

2

119749

23

120423 ✓

930

34.

D3537-1

Manufactured

No

230

Each

57.0000

3

3

D3537-1

Wearpad

**

BR 12-3-21

Location

Loc Qty

Loc Code

FP001

4

79883.

78592

4

FP002

53

69817

5

79834

48

NAS1149C0832R

Purchased

No

230

Each

305.0000

1

1

NAS1149C0832R

WASHER

**

BR 12-3-21.

Location

Loc Qty

Loc Code

ST297

305

114915 ✓

305

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-05-12 3:24:54 PM

Work Order ID: 80940

80940

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 05/03/2012

Required Date: 19/03/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C6A

Purchased

No

230

Each

672.0000

4

4

AN3C6A

BOLT

**

BR 12-3-21

Location

Loc Qty

Loc Code

FP001

1

111982

1

ST351

671

111982

2

116419

23

116549

2

116704

12

117619

10

117688

1

117872

5

118422

13

119449

21

120423

182

120693

400

4.

NAS1611-013

Purchased

No

230

Each

176.0000

8

8

NAS1611-013

O-RING

**

BR 12-3-21

Location

Loc Qty

Loc Code

FP001

176

116582

5

117291

2

117887

53

119623

36

120360

30

120910

50

62

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-05-12 3:24:54 PM

Work Order ID: 80940

80940

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 05/03/2012

Required Date: 19/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3535-25

Manufactured No

230

Each

19.0000

1

1

D3535-25

Wearshoe

**

BR 12.3.21

Location

Loc Qty

Loc Code

FP001

14

62233

1

80331

13

FP002

5

77617

5

D3794-1

Manufactured No

230

Each

12.0000

1

1

D3794-1

Gasket

**

BR 12.3.21

Location

Loc Qty

Loc Code

FP002

12

75042

12

MS21043-6

Purchased No

230

Each

817.0000

4

4

MS21043-6

NUT

**

BR 12.3.21

Location

Loc Qty

Loc Code

FG

20

103693

20

ST301

797

112314

87

117887

10

118384

200

120308

500

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-05-12 3:24:54 PM

Work Order ID: 80940

80940

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 05/03/2012

Required Date: 19/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3493-1

Manufactured No

250

Each

66.0000

2

2

D3493-1

Washer

**

Location

Loc Qty

Loc Code

ST050

66

70697

2

77573

24

78835

40

77573 16

78835 10

MS21083C8

Purchased

No

250

Each

67.0000

2

2

MS21083C8

NUT

**

Location

Loc Qty

Loc Code

FP002

1

115884

1

ST303

15

115884

0

118077

1

119309

2

119436

10

119638

2

ST304

51

120142

26

120731

25

120731

AN8C21A

Purchased

No

250

Each

57.0000

2

2

AN8C21A

BOLT

**

Location

Loc Qty

Loc Code

ST343

57

118758

5

120094

42

120872

10

120094

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-05-12 3:24:54 PM

Page 13

Work Order ID: 80940

80940

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 05/03/2012

Required Date: 19/03/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1515H3L

Purchased

No

230

Each

216.0000

4

4

*NAS1515H3I *

WASHER

**

BR 12.3.21

Location

Loc Qty

Loc Code

FG

40

102472

40

ST277

176

118686

3

119438

1

120072

72

120360

100

D2741

Manufactured

No

250

Each

37.0000

1

1

D2741

Blade, 350 Skidtube

**

Location

Loc Qty

Loc Code

ST

-10

ST466

47

71856

1

76984

36

D3532-1

Manufactured

No

250

Each

39.0000

2

2

D3532-1

Spacer

**

Location

Loc Qty

Loc Code

ST053

39

78839

39

76984

78839

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1			D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-5	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH:
ACID ETCH, ALONDE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
WELD PER DART QSI 004
- INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES ($\phi 0.297$) FOR WEARSHOE INSERTS
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS.
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
POWDER COATING WITH MEK DEGREASER.
- SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

SHOP COPY
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ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 80940 MLJ

12/03/05

RELEASED

F	INCORPORATE DSI 9413; QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/3 REPLACES D3536-13/35 (ZN C8-1); D3794-1/3 REPLACES D3536-13/35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARSHOE HOLES UNDER FWD/AFT SADDLE REMOVED (8 PL). WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/-042 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A8-1); REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS, CHANGE INSERTS; ADD D3631-1; REMOVE QTY (38) NAS1515H3L; REMOVE QTY (10) NAS1515H8L; REMOVE D2741, QTY (2) AN960C816; REMOVE QTY (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEO 9133/9157	PH	06.01.05
C	ADD D2750-3/D2750-4; INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24694-S293 TO AN8-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN	PA	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
DRAWN	PA		
CHECKED	PA	DRAWING NO.	REV. F
MFG. APPR.	PA	D2750	SHEET 1 OF 11
APPROVED	PA	TITLE	SCALE
DE APPR.	PA	350 SKIDTUBE ASSEMBLY	NIS
DATE	08.07.16	COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

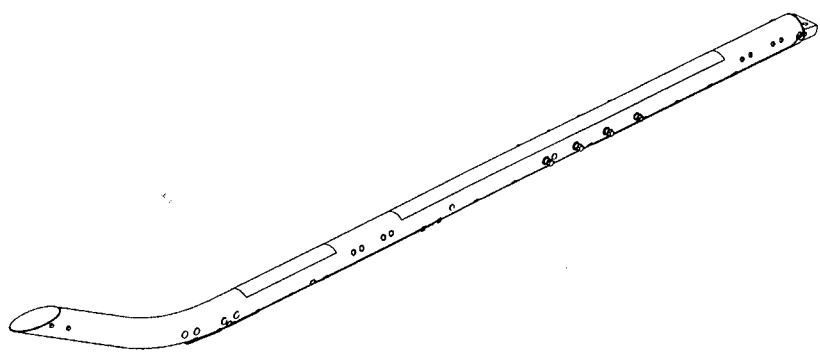
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

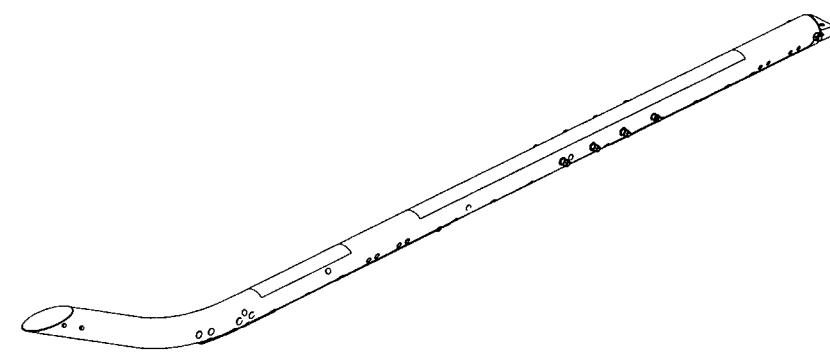
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

80940



D2750-041 350 SKIDTUBE ASSEMBLY, LH



D2750-042 350 SKIDTUBE ASSEMBLY, RH

RELEASED
EX-104-22-114

DESIGN	PCY	DART AEROSPACE USA, INC.	
DRAWN	AD	PORT HADLOCK, WA	
CHECKED	AD	DRAWING NO.	REV. F
MFG. APPR.	AD	D2750	SHEET 2 OF 11
APPROVED	AD	TITLE	SCALE
DE APPR.	AD	350 SKIDTUBE ASSEMBLY	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

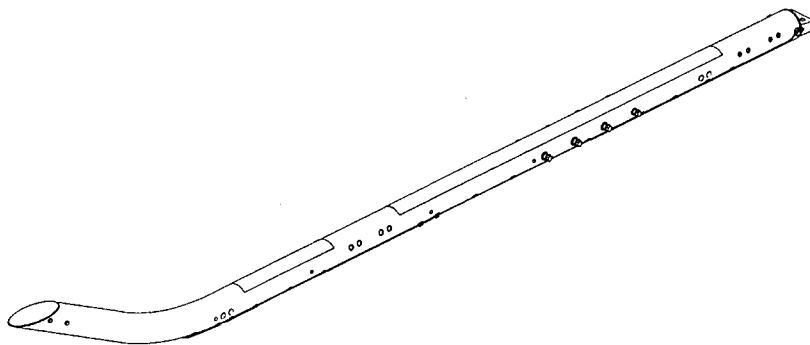
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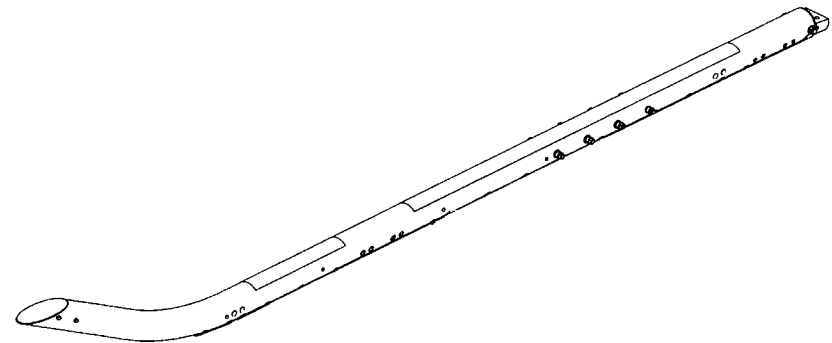
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

80940



D2750-043 350 SKIDTUBE ASSEMBLY, LH



D2750-044 350 SKIDTUBE ASSEMBLY, RH

RELEASED
68-9-22/11

DESIGN		DART AEROSPACE USA, INC.	
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 3 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	<small>COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.</small> <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

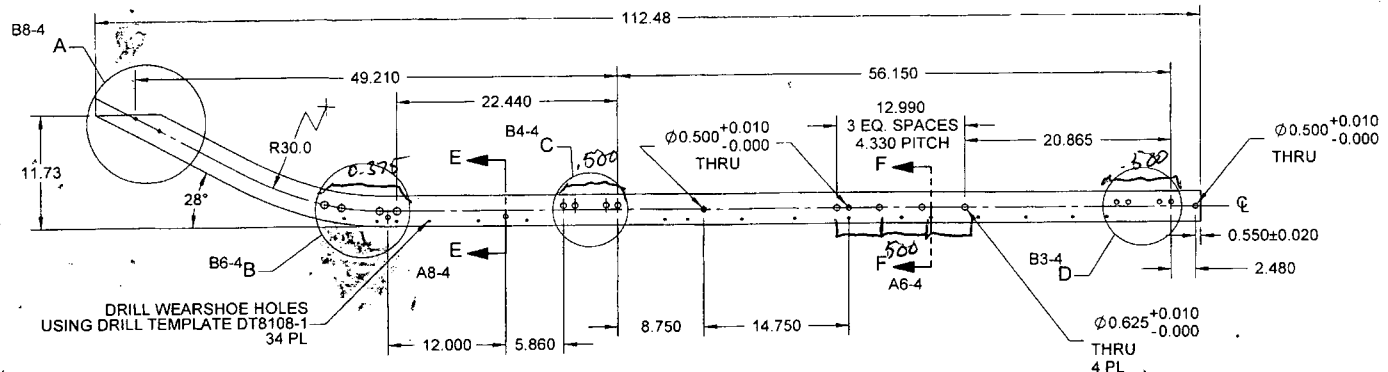
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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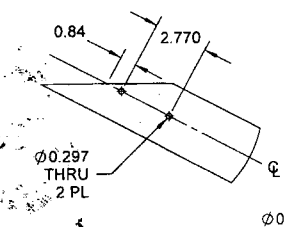
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

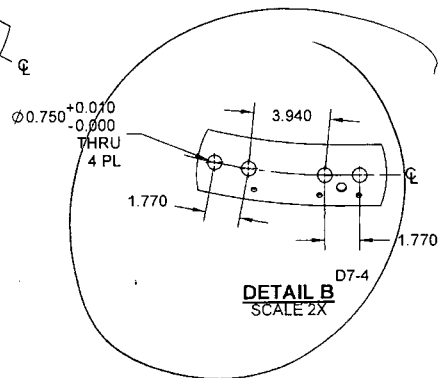
NOTE: Date & initial all entries



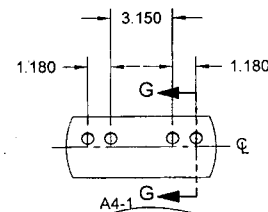
D2750-1 LH SKIDTUBE



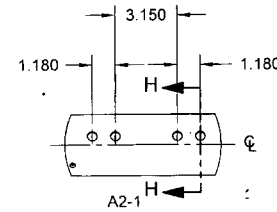
DETAIL A
SCALE 2X



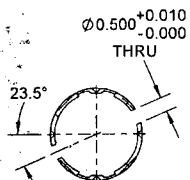
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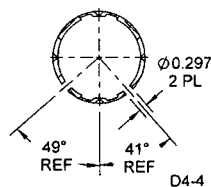
DETAIL C
SCALE 2X



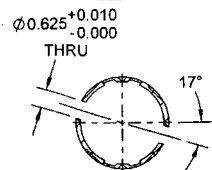
DETAIL D
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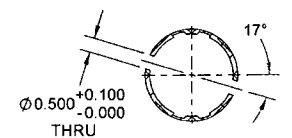
SECTION E-E
SCALE 3X, 2 PL



SECTION F-F
SCALE 3X, 17 PL



SECTION G-G
SCALE 3X, 4 PL



SECTION H-H
SCALE 3X, 4 PL

RELEASED

DESIGN	100	DART AEROSPACE USA, INC.	
DRAWN	100	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG APPR.		D2750	SHEET 4 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
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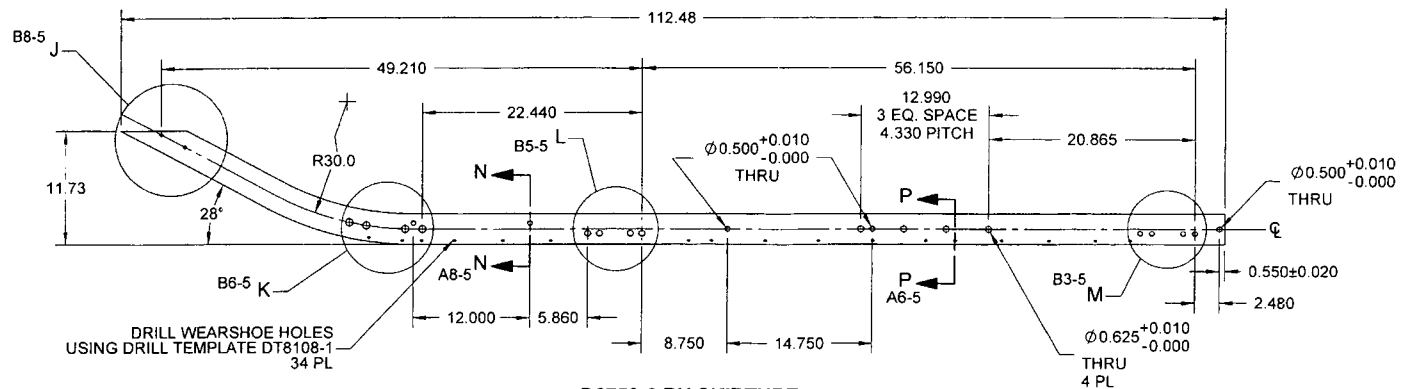
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

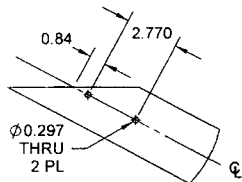
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

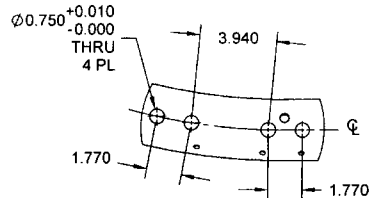
NOTE: Date & initial all entries



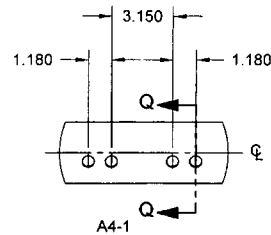
D2750-2 RH SKIDTUBE



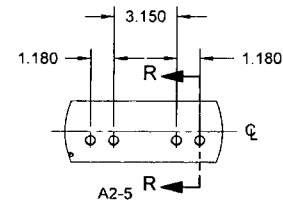
DETAIL J
SCALE 2X



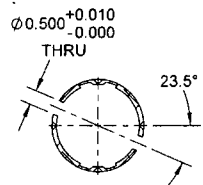
DETAIL K
SCALE 2X



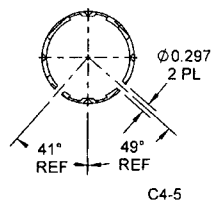
DETAIL L
SCALE 2X



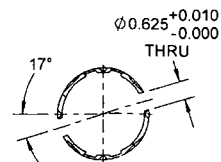
DETAIL M
SCALE 2X



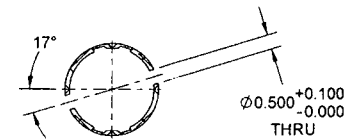
SECTION N-N
SCALE 3X, 2 PL



SECTION P-P
SCALE 3X, 17 PL



SECTION Q-Q
SCALE 3X, 4 PL



SECTION R-R
SCALE 3X, 4 PL

RELEASED

DESIGN	PE	DART AEROSPACE USA, INC.	
DRAWN	PE	PORT HADLOCK, WA	
CHECKED	PE	DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 5 OF 11
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DATE	08.07.16	NTS	
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80940

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

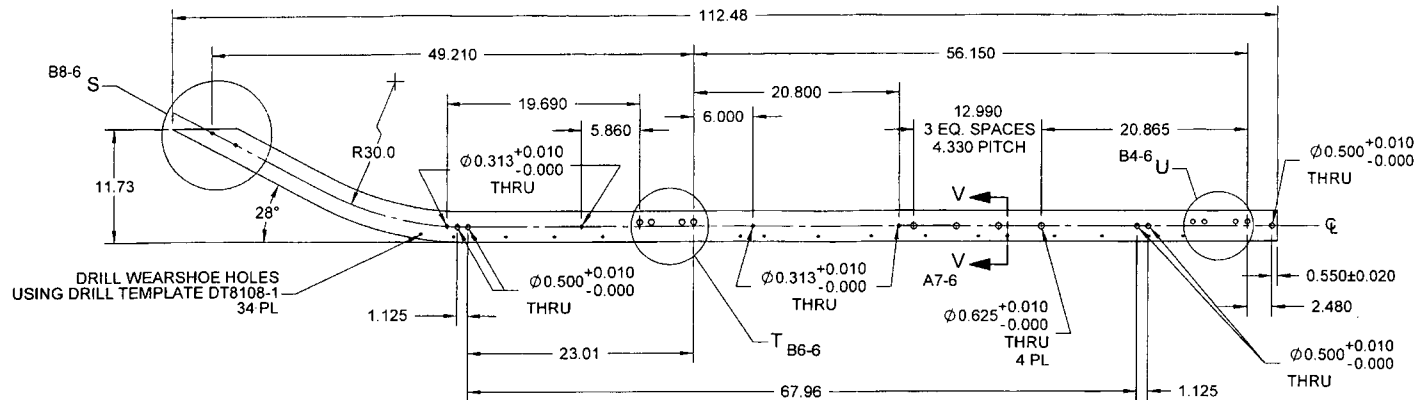
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

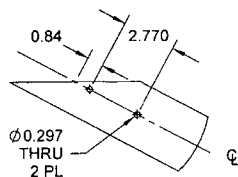
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

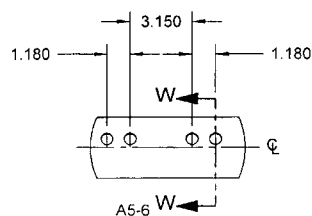
80940



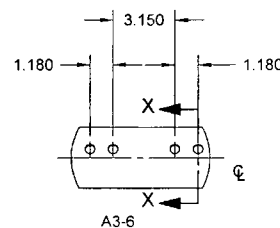
D2750-3 LH SKIDTUBE



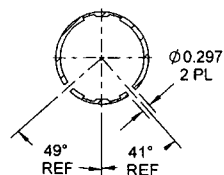
DETAIL S
SCALE 2X



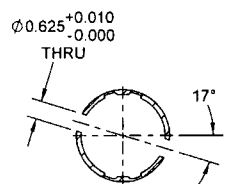
DETAIL T
SCALE 2X



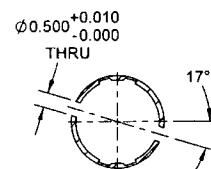
DETAIL U
SCALE 2X



SECTION V-V
SCALE 3X, 17 PL



SECTION W-W
SCALE 3X, 4 PL



SECTION X-X
SCALE 3X, 4 PL

RELEASED

DESIGN		DART AEROSPACE USA, INC.	
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 6 OF 11
APPROVED		TITLE	SCALE
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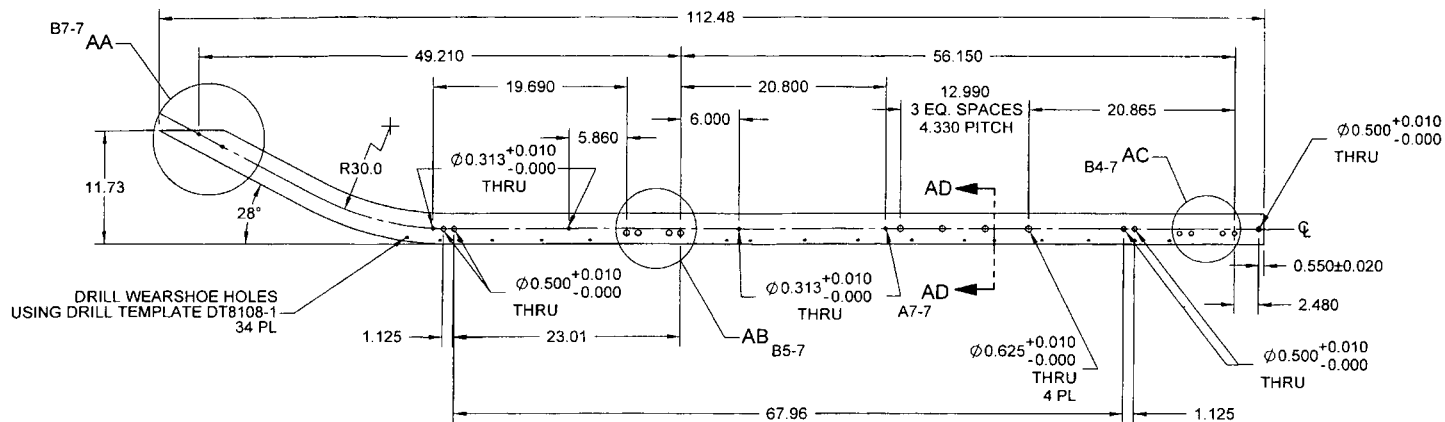
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

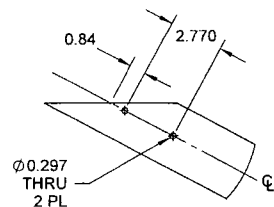
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

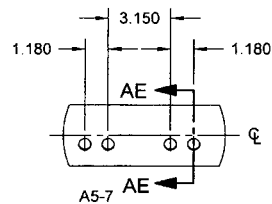
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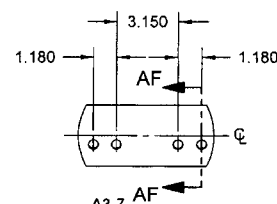
D2750-4 RH SKIDTUBE



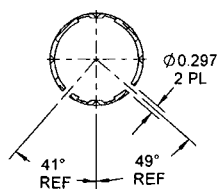
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SCALE 2X



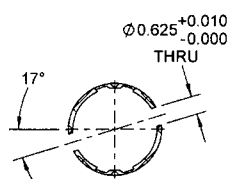
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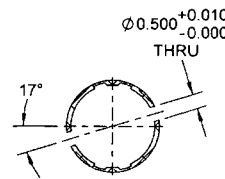
DETAIL AC
SCALE 2X



SECTION AD-AD
SCALE 3X, 17 PL



SECTION AE-AE
SCALE 3X, 4 PL



SECTION AF-AF
SCALE 3X, 4 PL

RELEASED

DESIGN	80940	DART AEROSPACE USA, INC.	
DRAWN	80940	PORT HADLOCK, WA	
CHECKED	80940	DRAWING NO.	REV. F
MFG. APPR.	80940	D2750	SHEET 7 OF 11
APPROVED	80940	TITLE	SCALE
DE APPR.	80940	350 SKIDTUBE ASSEMBLY	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

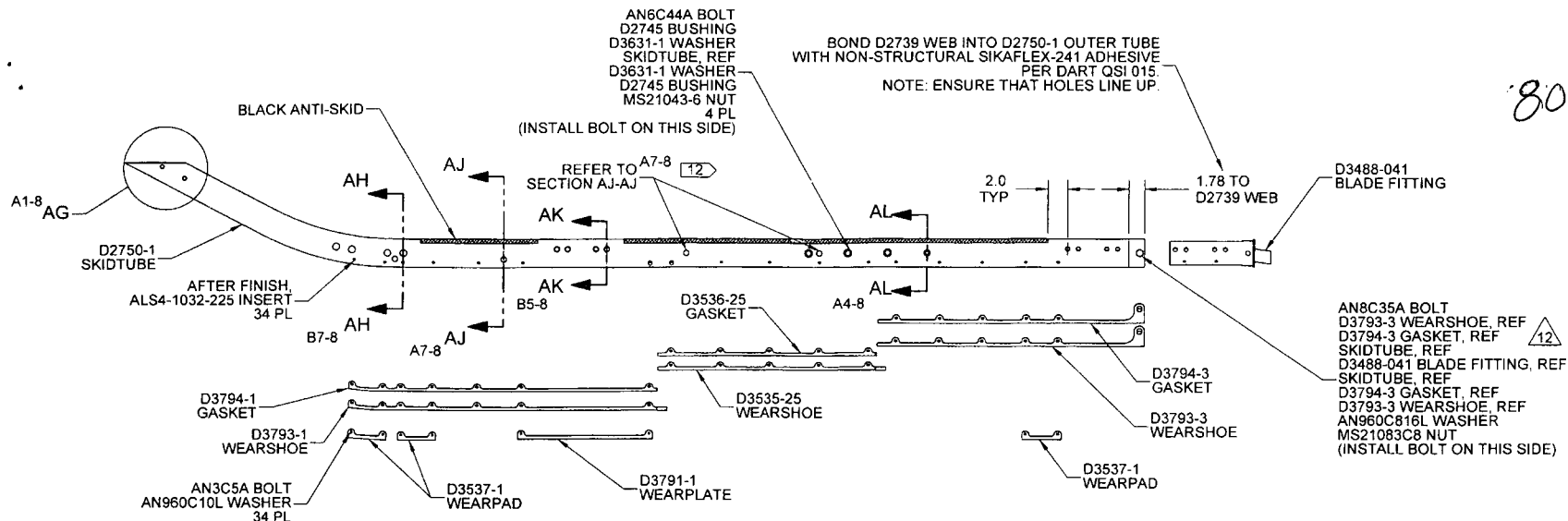
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

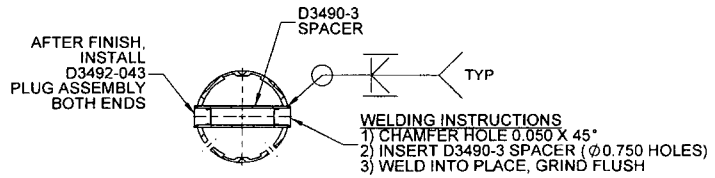
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

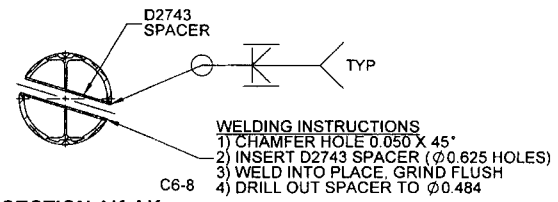
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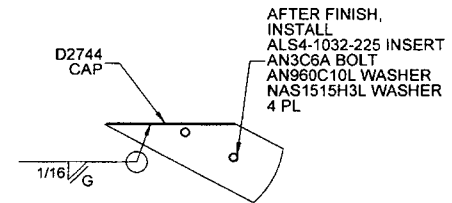
D2750-041 350 SKIDTUBE ASSEMBLY, LH



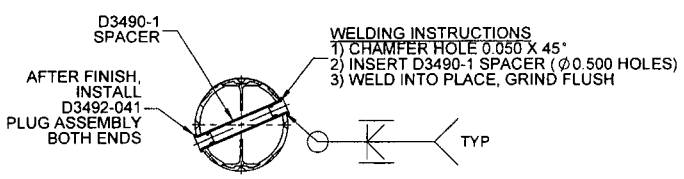
SECTION AH-AH
SCALE 3X, 4 PL



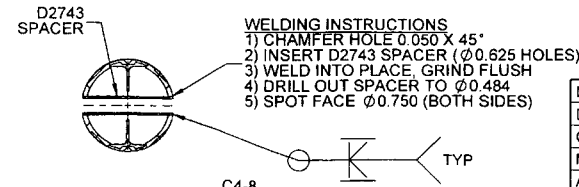
SECTION AK-AK
SCALE 3X, 4 PL



RELEASED
D8-8
DETAIL AG SCALE 2X



SECTION AJ-AJ
SCALE 3X, 4 PL



SECTION AL-AL
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)

DESIGN	PA	DART AEROSPACE USA, INC.	
DRAWN	PA	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 8 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

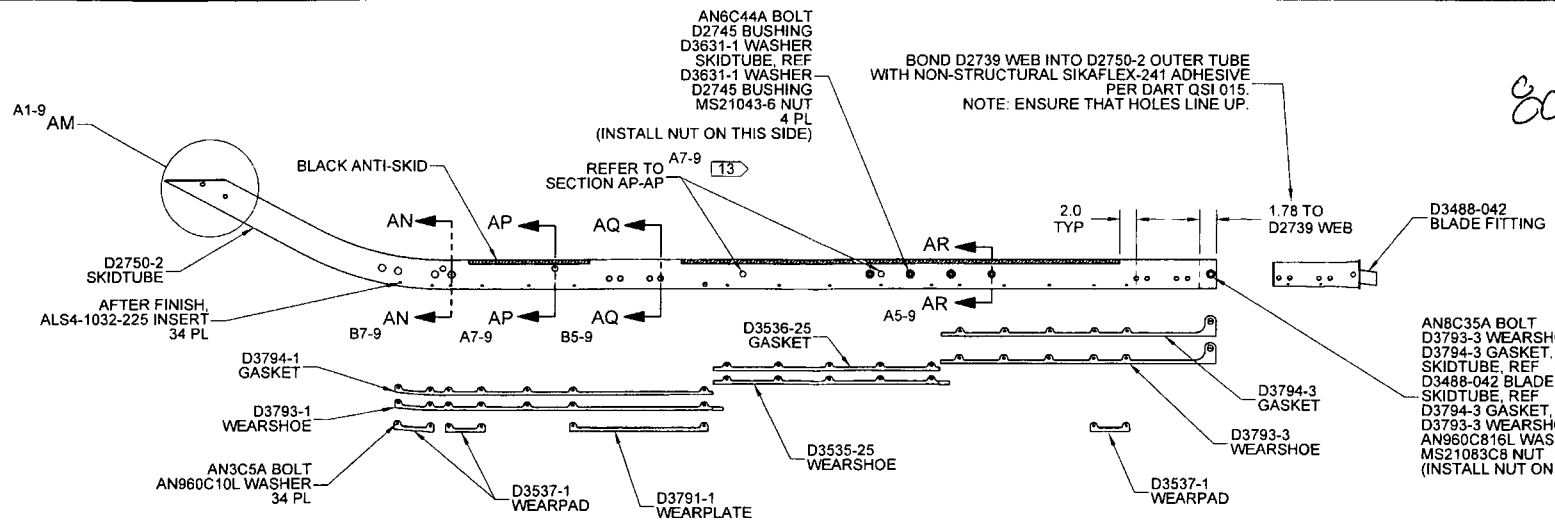
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 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

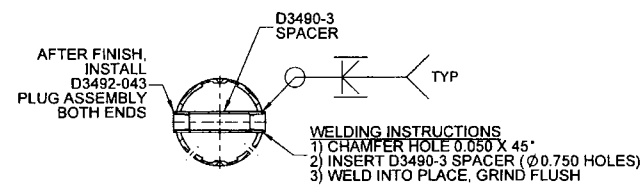
NOTE: Date & initial all entries

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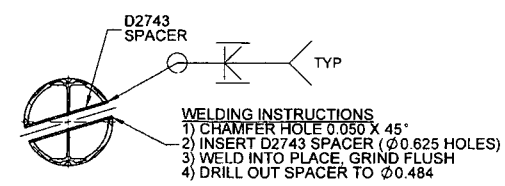
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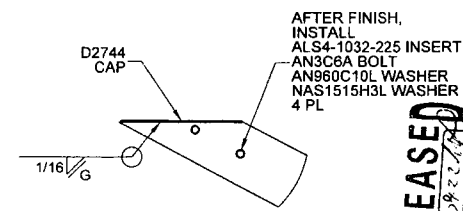
D2750-042 350 SKIDTUBE ASSEMBLY, RH



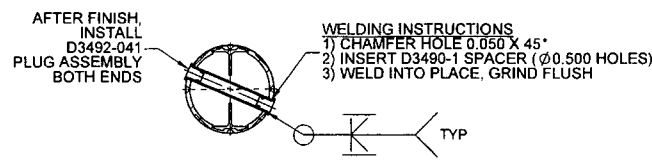
SECTION AN-AN
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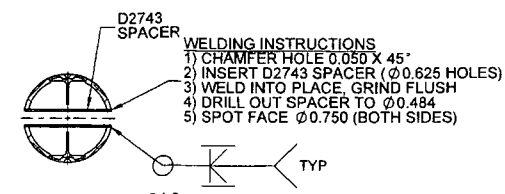
SECTION AQ-AQ
SCALE 3X, 4 PL



DETAIL AM
SCALE 2X



SECTION AP-AP
SCALE 3X, 4 PL



SECTION AR-AR
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)

DESIGN	PH	DART AEROSPACE USA, INC.	
DRAWN	PH	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 9 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
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RELEASED
08-07-16

8 7 6 5 4 3 2 1

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Dart Aerospace Ltd

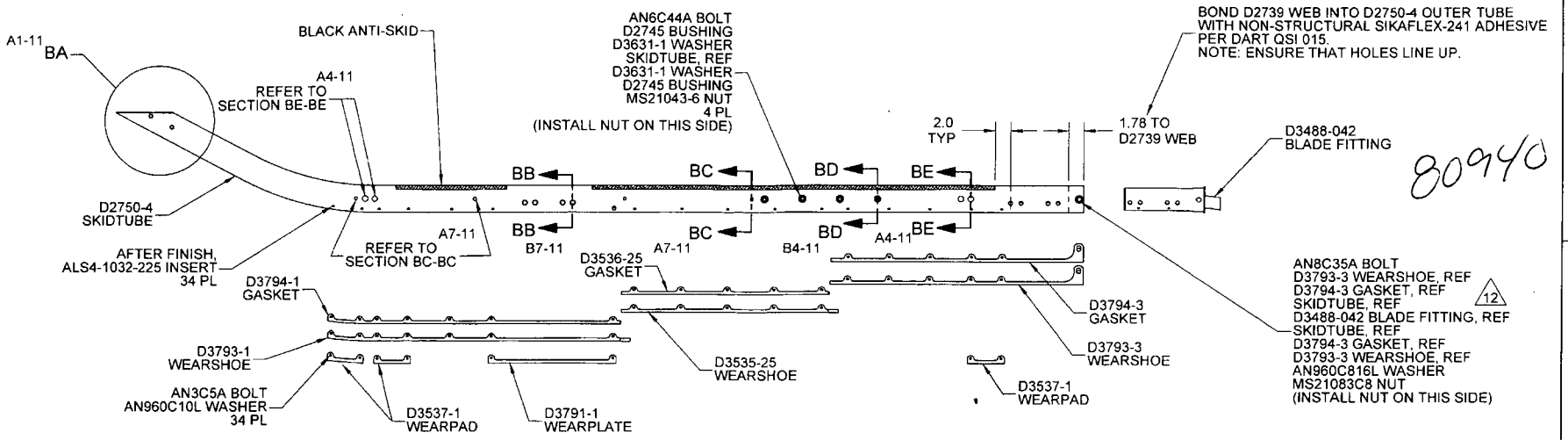
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

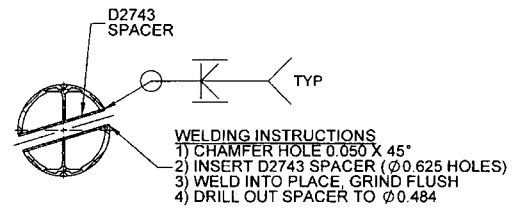
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

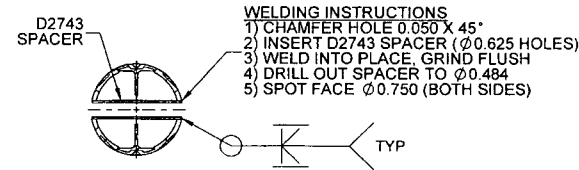
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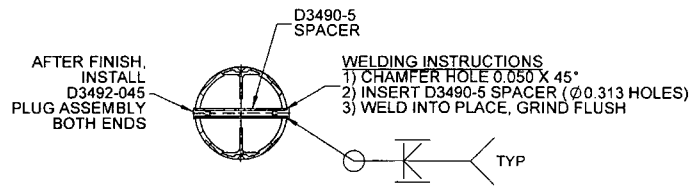
D2750-044 350 SKIDTUBE ASSEMBLY, RH



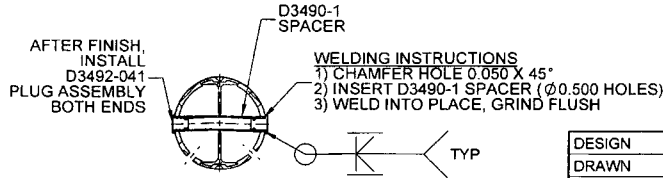
SECTION BB-BB
SCALE 3X, 4 PL



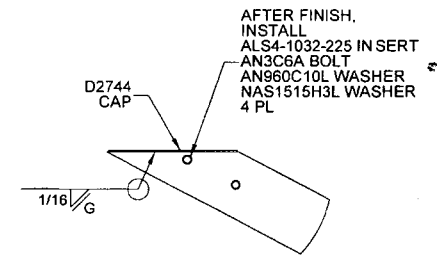
SECTION BD-BD
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)



SECTION BC-BC
SCALE 3X, 4 PL



SECTION BE-BE
SCALE 3X, 4 PL



DETAIL BA
SCALE 2X

DESIGN	RE	DART AEROSPACE USA, INC.	
DRAWN	RE	PORT HADLOCK, WA	
CHECKED	RE	DRAWING NO.	REV. F
MFG. APPR.	RE	D2750	SHEET 11 OF 11
APPROVED	RE	TITLE	SCALE
DE APPR.	RE	350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	COPYRIGHT © 1988 BY DART AEROSPACE USA, INC.	
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8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 282

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 78413
Part number: A350-636-011
Description: Skid tube
Welding Process: Tig[☒] Mig[]
Base material: Aluminium
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier David Newell Date of Test Coupon 12.02.01
Welder Barclay Elliott Date of Test Coupon 12.02.01

The above named individual is qualified in accordance with AWS D17.1.2001 to weld